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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/051,579

01/18/2002

Atsuhito Noda

A1-212 US

8662

23683

7590

07/31/2002

MOLEX INCORPORATED
2222 WELLINGTON COURT
LISLE, IL 60532

EXAMINER

LEON, EDWIN A

ART UNIT

PAPER NUMBER

2833

DATE MAILED: 07/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/051,579

Applicant(s)

NODA, ATSUHITO

Examiner

Edwin A. León

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☒ Claim(s) 9 and 10 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/8/98 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beshears (U.S. Patent No. 6,079,986) in view of Applicant's admitted prior art. With regard to Claims 1 and 4, Beshears discloses a coaxial connector comprising a coaxial plug (40) and a coaxial receptacle (14) electrically connected to the coaxial plug (40) by inserting the coaxial plug (40) therein, wherein: the coaxial plug (40) includes a plug main body (14,60) made of an insulative resin, and a plurality of pin type terminals (72,74) protruded from a surface of the plug main body (14,60); and the pin type terminals (72,74) are divided into one signal terminal (72,42) and a plurality of ground terminals disposed around the signal terminal (72,42), the signal terminal (72,42) is disposed at a central portion of a planar surface (where 14 is located) to be protruded from the planar surface (where 14 is located), and the ground terminals (74) are disposed around the signal terminal (72,42). See Figs. 13-17.

Beshears does not show the coaxial plug provided at an end of a cable.

Applicant's admitted prior art discloses the use of a coaxial plug at an end of a cable. See Page 1, Lines 4-21.

Thus, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the coaxial connector of Beshears by connecting the plug to an end of a cable as taught in Applicant's admitted prior art to make the connector suitable for systems using coaxial cables.

The limitation "for right-angled connection" has not been given patentable weight since it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex. parte Masham*, 2 USPQ2d 1647 (1987).

With regard to Claim 2, Beshears discloses the ground terminals (74) being arranged such that distances between adjacent ground terminals (74) are set to be equal to one another. See Figs. 16-17.

With regard to Claim 3, Beshears discloses the ground terminals (74) being arranged such that distances from the signal terminal (72,42) to the ground terminals (74) are set to be equal to one another. See Figs. 16-17.

With regard to Claim 5, Beshears discloses two of the ground terminals (74) being provided, which are disposed to be point-symmetric with respect to the signal terminal (72,42). See Figs. 16-17.

With regard to Claim 6, Beshears discloses three of the ground terminals (74) being provided, which are disposed at respective apex positions of a regular triangle centered by the signal terminal (72,42). See Figs. 16-17.

With regard to Claim 7, Beshears discloses four of the ground terminals (74) being provided, which are disposed at respective corner portions of a regular square centered by the signal terminal (72,42). See Figs. 16-17.

With regard to Claim 8, Beshears discloses eight of the ground terminals (74) being provided, which are respectively disposed at corner portions of a regular square centered by the signal terminal (72,42) and at longitudinal middle points of sides of the regular square. See Figs. 16-17.

Allowable Subject Matter

3. Claims 9-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The references fail to teach, disclose, or suggest, either alone or in combination, the coaxial receptacle includes an insulative housing having a surface formed with a plurality of guide holes into which the signal terminal and the ground terminals are respectively inserted, and a plurality of contacts disposed within the guide holes of the insulative housing; the contacts includes a signal contact contacted with the signal terminal and ground contacts contacted with the ground terminals; and the surface of

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the insulative housing has a planar portion surface-contacted with the planar surface of the coaxial plug.

Conclusion


4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Monroe (U.S. Patent No. 4,453,796), Mummey et al. (U.S. Patent No. 4,548,453), Lazar et al. (U.S. Patent No. 4,889,500), Morlion et al. (U.S. Patent No. 5,961,355), and Hosler, Sr. et al. (U.S. Patent No. 5,842,872) disclose coaxial connectors having plugs, receptacles, signal and ground terminals.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin A. León whose telephone number is (703) 308-6253. The examiner can normally be reached on Monday - Friday 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (703) 308-2319. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Edwin A. Leon
AU 2833
EAL
July 15, 2002


THO D. TA
PRIMARY EXAMINER